# V. SFB New Construction

Per ARS§41-1091 B: This substantive policy statement is advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the Arizona Administrative Procedure Act. If you believe that this substantive policy statement does impose additional requirements or penalties on regulated parties you may petition the agency under -ARS§ 41-1033 for a review of the statement.

ARS§15-2041, provides for school district governing boards to develop and annually update a capital plan. If the capital plan indicates a need for a new school or an addition to an existing school within the next four years, the school district is to submit the plan to the School Facilities Board.

### **A. Designing a New School Project** (Adopted January 10, 2008)

Once the district has an approved capital plan, they may begin designing the school. The process is as follows:

#### **Kick-Off Meeting**

The district must attend a kick-off meeting with SFB staff. In the meeting, SFB staff will review with the district the project terms and conditions, the policies of the SFB, and answer any questions the district might have.

#### Funds For Architectural, Engineering, Project Management, and Pre-construction

Once the Terms and Conditions are signed, the SFB will make 5 percent of the awarded funds available for architectural, engineering, project management, and pre-construction fees. Please see "Accessing Project Funds" below for the process on requesting and receiving project funds.

#### **Design Process**

During design, at least three design and budget review meetings will take place at the following points:

- 1. Schematic Design
- 2. Design Development
- 3. Guaranteed Maximum Price/Construction Documents

The Executive Director may require additional meetings if necessary. The Executive Director will develop and make available detailed agendas for the above meetings. For an alternative procurement project, the Design Phase is completed when the Construction Manager signs a GMP that is either within the established budget, or is supported by SFB staff. For a design-bid-build project, Design Phase ends when the district documents that they have received final building permits from the local building authority.

#### **Project Budget**

The items required to be included in the estimated budget are all elements of new construction, excluding land acquisition. These elements include, but are not limited to (1) architectural and engineering fees; (2) survey, testing, permits, advertising and printing; (3) construction costs; (4) furniture, fixtures and equipment; (5) any necessary project management and (6) a 3 percent contingency amount.

Design Fees for budget purposes should be based on 80 percent of the formula award. Final fees should be based on the final construction contract amount. Amounts reserved for other budget elements including furniture, fixtures, and equipment, will be developed and applied by the Executive Director. The Executive Director may review from time to time these amounts to ensure they are appropriate.

#### **Board Authorization to Proceed**

Once the design phase is complete, SFB staff will make a recommendation to the Board regarding the appropriateness of proceeding with the project. SFB staff may consider the following in developing the recommendation.

- 1. Design Does the project at least meet the minimum school facility adequacy guidelines as applied to new school construction? Has the district agreed to fund all design elements in excess of these standards?
- 2. Procurement Has the district received a fair market price for the project?
- 3. Student Projections Do updated student population projections continue to justify the awarded square footage?

The Executive Director may consider additional criteria as appropriate.

#### **Final Authorization To Contract**

If the district is using an alternative procurement method, SFB staff may authorize the district to sign the GMP once the district has demonstrated that it has obtained local (city, county, or equivalent) building department approval.

If the district is using the design-bid-build procurement method, SFB staff may authorize the district to contract if the received bids are within the established estimated budget.

The Executive Director will notify the district by letter that they are authorized to proceed with the project.

# B. Accessing Project Funds (Modified January 10, 2008)

After a school district has received final authorization to contract, additional monies will be distributed. Payments will be made on a timely basis based upon the school district's need supported by documentation from the district. The District should submit a "Request for Funds Form" with attached documentation including invoices to support the request. The District may include more than one invoice per request.

If a school district can establish that it will receive funds from the New School Facilities Fund in excess of what it will cost to complete the project in accordance with the minimum school facility adequacy guidelines as applied to new school construction, the school district can access those surplus funds prior to the completion of the project in order to implement change orders or other expenditures exceeding the original scope of the project.

District funding is only loaded if the district is participating in the funding of the project. This may occur at the onset of the project or when the project is underway and the district adds work to the project for which the SFB has not or cannot provide funding.

#### **Change Orders**

If during the project it becomes necessary for a change order to be issued, the change order must be submitted to the district's SFB liaison for approval. Upon receiving approval the funds will be moved from the contingency line item (or wherever it is appropriate) to the base line item, so that costs can be charged against it. If the change order is strictly a district cost, funding will be added to the district line item to account for that cost.

#### **Cost Sharing**

Due to the type of project required and the statutory limitations on the SFB, the district may have elected to participate in the cost of the project. This will result in a percentage split. To ease in the logistics of cost sharing, the percentage assigned to the district is based on the proportionate share of the base (construction) cost. If during the project, the funding distribution changes, the percentage charged to the district will also be adjusted.

When a bill is submitted that falls against the construction contract, the district percentage is computed against the entire bill and the costs are distributed accordingly. The split of the funding is recorded and only the SFB portion of the costs is electronically transmitted to the district.

# C. Policy on Project Management Services for New Construction

(Modified January 10, 2008)

A school district that does not have the experience or resources to successfully oversee a new school construction project may request technical support from the School Facilities Board in the form of project management pursuant to ARS§15-2002.C. (13).

ARS§15-2041(E) states that if the Board modifies the cost per square foot award based on geographic conditions, site conditions, or inflation, and a district has utilized project management or pre-construction services for the project, the Board may deduct the cost of these services from the additional monies awarded the school. However, if the school district demonstrates in writing to the Board's satisfaction that the school district does not have the experience or resources necessary to successfully complete the new school construction project, the Board may provide the school district with monies to pay for the project management services in addition to the monies the school district receives pursuant to the statutory formula prescribed by ARS§15-2041.

The cost of the project management shall be made a part of the overall cost of the new school, and those funds shall be derived from the total allocation for the project provided by

the School Facilities Board. Should the district funds satisfy the base cost of the new school plus the cost of project management, then the School Facilities Board will not provide any additional funds.

In the event that a school district does not request project management services, but in the opinion of the SFB staff the project is in jeopardy without such professional services, the Executive Director may notify the district that the project requires the use of project management services and the district's allocation shall be assessed for costs incurred for these services.

The Executive Director may terminate awarded funding based on inadequate performance by the selected firm.

# **D. Architectural Fee Guidelines** (Adopted January 1999, Modified January 10, 2008)

These guidelines are to be used to determine the Lump Sum Architectural & Engineering (A&E) fees for "Basic Services" for all SFB funded projects including new school construction.

\*\* These are guidelines, not a schedule \*\*

For new school construction projects, the fee should be determined by the square footage times the formula cost of the planned facility or project (construction cost) multiplied by a factor determined by the size and complexity of the scope of the project. See below both "Project Types" (to determine the difficulty of the project) and "Fee Guidelines Multiplier" (for the percentage multiplier) to determine the architect's fee. The final fee should be based on either 80 percent of the awarded formula or the actual construction cost.

#### **Basic Services**

The architectural contract should identify and include all of the services necessary to design and construct the project under "Basic Services" without any hidden or unknown cost. The services to be included as part of the contract as "Basic Services" shall consist of architectural, structural, mechanical, electrical, civil, and landscape design. The descriptions of these services are described in the American Institute of Architect (A.I.A). Document B141, "Standard Form of Agreement Between Owner and Architect (1987 Edition)", Article 2, and Add, Modified and/or Delete paragraphs 2.6.5, 2.6.5.1, 2.6.15.1, 3.2, 3.2.1, 3.2.2, 3.2.3, 3.3.1.2, 3.3.1.3, 3.3.3, 3.3.4, 3.3.6, 3.3.9, 3.4.1, 3.4.4, 3.4.9, 4.6.1, 4.6.1.1, 5.2.2, 5.2.3, 8.6, 8.7.1, 8.7.2, 8.7.3, 10.2.1.1, 10.2.1.2, 10.2.1.4, 10.2.1.6

#### **Construction Cost**

The cost of construction includes the cost of the construction of the building, site improvements, and all fixed and installed equipment. It does not include Furniture, Fixtures & Equipment (FF&E), testing, surveys, permits, land costs, studies, contingencies, or A&E fees.

#### **Project Types**

Group A - MORE THAN AVERAGE COMPLEXITY: New complex stand-alone facilities such as special purpose classrooms, laboratory classrooms, libraries, auditoriums, and food service facilities.

Group B - AVERAGE COMPLEXITY: Total facilities such as new elementary schools, middle schools, high schools, or large additions to existing facilities.

Group C - LESS THAN AVERAGE COMPLEXITY: New less complex stand-alone facilities such as warehouses, maintenance facilities, bus barns, offices, and storage facilities or any repetitive design use of a facility.

Group D - REPAIRS AND RENOVATIONS: Miscellaneous repairs and renovations, alterations to facilities, code corrective work or upgrades, system replacements, etc.

#### Fee Guideline Multiplier

Construction Cost:	Group A	Group B	Group C	Group D
\$ 0 to \$ 100,000	8.8%	7.9%	7.2%	8.9%
\$ 100,000 to \$ 400,000	7.8% - 8.8%	7.2% - 7.9%	6.6% - 7.2%	8.3% - 8.9%
\$ 400,000 to \$ 1,000,000	7.2% - 7.8%	6.7% - 7.2%	6.2% - 6.6%	7.8% - 8.3%
\$ 1,000,000 to \$ 4,000,000	6.3% - 7.2%	6.0% - 6.7%	5.7% - 6.2%	7.2% - 7.8%
\$ 4,000,000 to \$10,000,000	6.0% - 6.3%	5.5% - 6.0%	5.3% - 5.7%	6.8% - 7.2%
\$10,000,000 to \$20,000,000	5.5% - 6.0%	5.5% - 6.0%	5.0% - 5.3%	5.7% - 6.8%
\$20,000,000 and above	5.5% - 6.0%	5.5% - 6.0%	4.3% to 5.0%	Up to 6.0%

#### Fee Formula

SFB Estimated Construction Cost \_\_\_\_\_ x Multiplier \_\_\_\_\_ % = Fee

#### **Notes:**

The higher the Construction Cost in each range, the multiplier percentage should be proportionally lower.

Districts in remote areas and/or with high cost per square foot should not use a higher multiplier percentage than normal. The increased cost per square foot difference automatically increases the fee to cover the additional cost of travel. Since most of the architects' offices and their consultants are in urban areas, the cost to design and produce the contract documents would be the same as if the project were in the same city.

# E. Closeout Procedures (Modified January 10, 2008)

Districts shall be considered to have reached the substantial and/or final completion stage upon submitting to the School District's SFB Liaison the required documentation by providing the following:

- 1. Certificate of Occupancy from the local building department.
- 2. Architect's Certificate of Substantial Completion.

- 3. Final request for payment (must contain all pages and complete Schedule of Values) from the contractor, certified by the architect showing the project has zero dollars remaining to be paid to the General Contractor for construction.
- 4. Superintendent's letter of assurance that the facility was built according to the minimum school facility adequacy guidelines as applied to new school construction, including the installation of all required FF&E.

**Note:** Letter requires superintendent's signature.

- 5. (IF APPLICABLE) Fire Marshal's certification that installed, SFB funded, water tank is adequate to provide fire protection at the new school facility.
- 6. Provide full/complete Specifications in .pdf format and Plan Drawings in .pdf format, construction document copy on electronic compact disk. Label each 'disk' with School District Name, School Name, and SFB Project Number.
- 7. Required Documents include: Architectural, Structural, Civil, Electrical, Mechanical and Plumbing, Landscape, Kitchen Design, drawing documents and written specifications that were reviewed and approved for building permit.
- 8. All documents sent to the SFB, must contain for each project the following at or near the top of each sheet:
  - a. The SFB Project Number
  - b. The full School District Name and full address
  - c. New School Facility Name, Grade Configuration and Full Address with Zip Code
- 9. On-site walk-through by SFB staff, shall verify one computer per 8 students, based on the approved SFB occupancy of the facility, and that all other FF&E has been installed.
- 10. On-site walk-through by SFB staff, shall verify and ask the librarian for assurance that 10 new library books per student, based on the approved SFB occupancy of the facility, has been installed in the library. If the project fails inspection, the SFB staff may withhold sufficient funds to correct the deficiency.

If the project has not processed a payment transaction for more that six months, SFB staff may take steps to initiate the closeout procedure.

# F. Policy on Project Balance Funds for New Construction

(Adopted November 6, 2003, Modified January 10, 2008)

**Note:** This policy applies to projects originally established after August 22, 2002.

ARS§15-2041 (I) states that if a school district has surplus monies received from the new school facilities fund, the school district may use the surplus monies only for capital purposes for the project for up to one year after completion of the project. If the school district possesses surplus monies from the new school construction project that have not been expended within one year of the completion of the project, the school district shall return the surplus monies to the School Facilities Board for deposit in the new school facilities fund.

Current budgeting procedures including the three to five percent project contingency set aside will continue under existing rules.

The "one-year" period will be counted from the date of Substantial Completion as certified by the architect of record. Dollars that are legally obligated by either a contract or a purchase order will be deemed spent.

Districts must obtain approval from the Executive Director prior to expending any funds under this section. The district may appeal to the School Facilities Board Chairman for a review by the full Board if there is a dispute between the Executive Director and the district regarding the appropriateness of these expenditures.

The Executive Director may approve appropriate design fees for a proposed project.

Approved purposes will be any capital item on the project site. This includes soft capital items (as defined by ARS§15-962), landscape improvements, athletic facilities, administrative space for the project, additional academic space, etc. If soft capital items are purchased, the district must certify that the item will be used at the project site for at least three years.

If square footage is constructed (either academic or administrative), that space will be counted as visible space for future new school facility calculations.

Districts may access project balance funds for on-site capital purposes after the construction contract has been awarded. Districts may access contingency funds for capital purposes once Substantial Completion is reached.

If a district contributes dollars to the project in excess of the contingency balance, at project closeout the remaining contingency amount will be released to the district as a reimbursement.

# G.SFB Oversight of Construction Manager at Risk Process Owner Training (Modified January 10, 2008)

If a district uses the construction manager at risk procurement method, they must complete the following steps.

#### **Request for Qualifications**

SFB Liaison will review RFQ for the following items:

- 1. Applicable Procurement Rules
- 2. Approve project scope
- 3. Screening criteria
- 4. Form of agreement for CMAR services
- 5. Dispute criteria from AAC R7-2-1155 through R7-2-1159

SFB staff may elect to observe interviews and selection discussions.

#### **Preliminary Budget Meeting**

SFB staff architect, SFB Liaison and District construction team (Team is district's designated construction coordinator, architect and CMAR)

1. Review base construction budget and Schedule of Values

- 2. Discuss CMAR contingency set-aside
- 3. Review all SFB requirements for new construction and provide guideline information
- 4. Discuss SFB recommendations for economical construction, energy efficiency, and indoor air quality standards during construction
- 5. Discuss any identified land issues
- 6. Discuss solar review requirements under ARS§34-452
- 7. Discuss minority and women-owned business inclusion recommendation

#### **Schematic Design and Budget Review Meeting**

SFB staff architect, SFB Liaison, and district team will review schematic design and estimate for:

- 1. Minimum school facility adequacy guidelines as applied to new school construction adherence
- 2. Review the design limitations for over-budget projects
- 3. Discuss strategies for keeping project within budget
- 4. Discuss minority and women-owned business inclusion recommendation

#### **GMP/CD Review Meeting**

SFB staff architect, SFB liaison, SFB staff construction cost specialist and district team will review construction documents and estimate prior to GMP bid phase. The SFB liaison may elect to attend district-architect-CMAR GMP discussions prior to setting of GMP.

- 1. Verify minimum school facility adequacy guidelines as applied to new school construction compliance
- 2. Verify final scope of work
- 3. Review value-engineering recommendations
- 4. Conduct estimate discussion as necessary
- 5. Review process for number of bidders in each trade (3 sub bids in all trades recommended)
- 6. Review GMP contingency
- 7. Review Schedule of Values

This review will be based on a comparison of similar projects. SFB staff will develop a systematic way to record and compare new construction costs.

#### **Construction of Project**

SFB staff will review all change orders and monitor project contingency funding.

SFB staff will conduct site visits as determined by the SFB liaison.

SFB staff will attend final completion walkthrough as determined by the SFB liaison.

The District will submit a monthly report to the SFB liaison that includes schedule information, the RFI log, the COR log, the Change Order log and other information as requested.

#### **Post Construction**

SFB staff will review the final project audit conducted by the school district. SFB staff may decide to audit selected projects.

# **H.Policy on Inflation Adjustments** (Adopted February 2005, Modified August 10, 2006, April 2007 and January 10, 2008)

Based on Attorney General Opinion No. I04-011, the Board has the authority to increase project awards for inflation if "good cause exists." The SFB will determine if good cause exists based on the following process:

- 1. SFB staff will review the construction plans and other contracts to determine if value-engineering or renegotiation opportunities exist. This would include the removal of non-minimum school facility adequacy guidelines as applied to new school construction upgrades and could include removal of funding for discretionary non-construction contracts. This step would generally take place during the design phase of the project to minimize the cost of redesign.
- 2. Require the district to employ a traditional design-bid-build procurement system, or any alternative delivery method as approved by the Executive Director.
- 3. If bids or the guaranteed maximum price are still over the original budget, determine if re-bidding the project is appropriate.

If the district completes the above steps, has followed all the required policies and procedures, and is unable to build the project, SFB staff may seek approval of additional funds from the Board. If additional dollars were provided, any dollars remaining at the end of the project, i.e. unused contingency would be returned to the SFB to offset the cost of the additional dollars.

To supplement the above policy in allowing districts to use alternative delivery methods and still qualify for inflation funding, the Board developed specific guidelines on how to administer the CMAR procurement method. These steps are to ensure the method is employed correctly and that SFB staff receives sufficient data to determine that the presented costs are consistent with market conditions.

# I. New Construction Design Standards (Modified January 10, 2008)

When inflation funding is requested by a school district to complete a new school construction project, SFB staff shall employ the following design limits when determining the amount of funding to provide. The dollar amounts included are descriptive only and should not be seen as absolute limits. The following is a guide intended to indicate the quality levels the SFB is authorizing. The Executive Director may update these amounts as necessary.

#### **Building Limits** (Modified November 2, 2006)

To provide additional guidance in applying the minimum school facility adequacy guidelines for new construction projects that are over the formula budget, the Board has decided to limit the number of buildings and lineal feet the SFB will fund. The table below shows the number of buildings the SFB will fund based on the total square footage of the school:

Square feet	0 – 60,000	60,000- 125,000	125,000- 170,000	170,000- 240,000	240,000 +
Number of Buildings	1	2	3	4	5

The following table shows the allowable minimum lineal feet. A comparison of the shapes that may be produced is included as Exhibit Item V. H.

Building Size	Lineal Feet Allowed	
Under 60,000 sq. ft.	1,600	
67,669 sq. ft.	2,466	
73,953 sq. ft.	2,578	
101,640 sq. ft.	3,020	
134,869 sq. ft.	4,260	

#### **Flooring Limits**

Flooring (carpet/VCT) throughout the school with ceramic floor and cove tile for all toilet rooms. SFB staff recommends the Board provide 2 percent of the total construction cost for flooring.

#### Cost

SFB staff estimates basic flooring can be installed at \$2.25 per square foot. Therefore, in an 80,000 square foot K-8 building, flooring would cost approximately \$180,000.

The estimate for ceramic flooring is \$7.00 per square foot. An average 80,000 square foot K-8 has 4,000 square feet of toilet room space, for a total cost of \$28,000 (4,000 x \$7.00).

#### **Gym Floors**

For 7-12 schools, SFB staff recommends the Board provide funding for one gym floor up to a 50'X84' (standard basketball court) plus a 10-foot wide perimeter or 7,280 (70 x 104) square feet.

#### Cost

SFB staff estimates a standard gym floor costs approximately \$13 per square foot, or \$95,000.

#### Millwork

SFB staff recommends the Board provide funding for ten feet of millwork per classroom, plus 40 feet in science, art and music rooms.

**Note:** a standard 900 square foot classroom has 120 lineal feet of wall space.

#### Cost

SFB staff estimates millwork to cost approximately \$200 per lineal foot. An 80,000 square foot school will have approximately 40 classrooms for a total cost of \$80,000 (\$200 X 10 square feet X 40 classrooms) or \$1.00 per square foot.

#### **Exterior Lighting**

SFB staff recommends the Board provide funding for exterior wall fixtures every 50 feet and lighting for required parking spaces. For example, in an 80,000 square foot school this design standard will allow an exterior perimeter of approximately 2,700 feet and provide funding for 54 exterior lights.

Additionally, that same building would have approximately 80 required parking spaces (one per full-time staff member and one for each 100 students). An average parking lot requires 300 square feet per parking spot for a total parking lot of 24,000 square feet. A parking lot light can illuminate approximately 8,000 square feet. To adjust for different configurations, SFB staff suggests the Board assume that each light can cover 5,000 square feet. Therefore, the SFB would provide funding for five lights.

#### Cost

SFB staff estimates that exterior wall fixtures cost approximately \$300 per fixture. Additionally, SFB staff estimates the cost of parking lot lights (including installation) at \$4,000 per light. For an 80,000 square foot school, the total cost would be \$36,200.

#### **Canopies**

SFB staff recommends the Board provide funding for one percent of the total interior square footage for canopies.

#### Cost

SFB staff estimates canopy costs at \$20 per square foot. Therefore, for an 80,000 square foot school, the SFB would provide funding for 800 square feet of canopy space or \$16,000.

#### **Playground Structures and Canopies**

SFB staff recommends the Board provide funding for two playground structures including shade structures (one for primary grades and one for upper grades) for each campus that has K-6 grades.

#### Cost

SFB staff estimate the cost of two playground structures with canopies as described above at approximately \$130,000.

#### Landscaping

SFB staff recommends the Board provide funding for a landscaping budget of 1 percent of the current cost per square foot multiplied by the awarded square footage. For example, for an 80,000 square foot K-8, the current cost per square foot is \$132.85 or \$10,628,000. One percent of that amount is \$106,280. Within that budget, a school could install approximately 100,000 square feet (2.5 acres) of turf in addition to some landscaping at the front of the school. The SFB would encourage the use of xeriscape as much as possible.

**Summary** The following is based on an 80,000 square foot K-8:

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Item	Suggested Application	Total Cost	Cost per square foot
Flooring	Carpet full school, ceramic tile in bathrooms	\$160,000	\$2.00
Gym Floors	One 8,400 square foot floor	\$80,000	\$1.00
Millwork	10 lineal feet per classroom/40 feet for science, art and music rooms	\$100,000	\$1.25
Exterior Lighting	Exterior lights every 50 feet and parking lot lights	\$36,200	\$.45
Canopies	1 percent of interior square footage for canopy space	\$16,000	\$.20
Playground Structures	Two playground structures for each K-6 campus	\$130,000	\$1.63
Landscaping	1 percent of total budget allowed for landscaping	\$106,280	\$1.33
Total		\$628,480	\$7.86

# **J. Reporting Requirements**

By October 15, each district shall report:

- 1. The projects funded at each school in the previous fiscal year with monies from the district new school facilities fund
- 2. An accounting of the monies remaining in the new school facilities fund at the end of the previous fiscal year

Forms are shown in Exhibit Item V.I.